

## ABSTRACT OF THE DISCLOSURE

The present invention relates to novel mammalian DNA-R proteins and genes that encode such proteins. The invention is directed toward the isolation and characterization of mammalian DNA-R proteins. The invention specifically provides isolated complementary DNA copies of mRNA corresponding to rat and human homologues of a mammalian DNA-R gene. Also provided are recombinant expression constructs capable of expressing the mammalian DNA-R genes of the invention in cultures of transformed prokaryotic and eukaryotic cells, as well as such cultures of transformed cells that synthesize the mammalian catecholamine receptor proteins encoded therein. The invention also provides methods for screening compounds *in vitro* that are capable of binding to the mammalian DNA-R proteins of the invention, and further characterizing the binding properties of such compounds in comparison with known DNA-R agonists and antagonists. Improved methods of pharmacological screening are provided thereby.